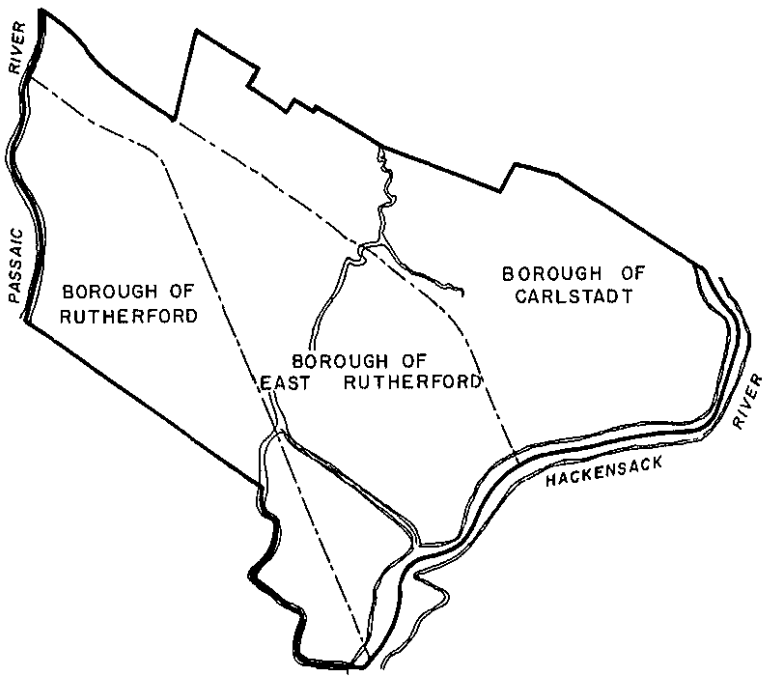
JOINT MEETING

RUTHERFORD, EAST RUTHERFORD AND CARLSTADT

NEW JERSEY

PRELIMINARY REPORT ON SEWERAGE FACILITIES



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were held with major developers who are proposing construction in this area. A study was also made of soil conditions at various locations in the area in order to determine the types of construction necessary for the installation of sewerage facilities.

Present Flows and Plant Loadings

There has been only a moderate increase in population in the three Boroughs in the last 35 years, with an increase of the total population from 27,420 in 1930 to about 36,000 in 1965; however, there has been a steady industrial growth, originally in the area along Route 17 and the Erie Lackawanna Railroad, and more recently in the meadowland areas east of Route 17.

As a result of the above growth, the flow as well as industrial waste loading at the treatment plant has been steadily increasing. Although there has been some reduction in total annual flow during the past two years as a result of drought conditions and water conservation, it is anticipated that the flow will return to a higher rate upon resumption of normal water use. The average daily plant flow during the period 1955 through 1965 was as follows:

1955 - 1.92 mgd	1961 - 2.65 mgd
1956 - 2.08 "	1962 - 2.90 "
1957 - 2.06 "	1963 - 3.00 "
1958 - 2.15 "	1964 - 3.09 "
1959 - 2.34 "	1965 - 2.96 " (Estimated at 3.3 mgd with normal flow conditions)
1960 - 2.52 "	

In addition to the increased average flows, peak flows to the plant during storms have required operation of all pumps including the standby pump. Thus, maximum

flows are at least 11 mgd due to storm flow and high industrial peaks, whereas most of the plant units were apparently designed for a lower peak flow.

As a result of the above increased flow and loading, deterioration of the treatment plant and more stringent New Jersey State Health Department requirements, the plant is presently not producing a satisfactory effluent, and extensive modifications and repairs to the plant would be required just to provide adequate treatment for flows from the areas presently sewered. However, the following additional flows must also be considered:

(a) The UOP Company in East Rutherford desires to connect into the East Rutherford sewer systems and discharge to the treatment plant a flow estimated at an average of 0.5 mgd consisting of an industrial waste which could not be handled and properly treated under present plant conditions.

(b) All three Boroughs have sewered areas between Route 17 and Berry's Creek which, as they develop, will cause an increase in plant flows.

(c) Development is restricted in the meadow areas of Carlstadt and East Rutherford south and east of Berry's Creek until sewers are provided in such areas, because high ground water conditions and clay subsoils make subsurface sewerage treatment unsatisfactory in the meadowlands. Upon installation of sewers, these additional flows, if discharged to the Joint Meeting plant, would produce even heavier loadings upon the treatment facilities.

Future Flows

In order to establish a program for sewerage facilities in the three municipalities, estimates have been made of the flows which might be expected under a First Stage program and for "ultimate" complete development. The First Stage Program would serve essentially all of the presently sewered areas, the developed and unsewered meadowland area in Carlstadt and a small amount of flow from